“Leaders First and Grants database”
Phase 2

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2 Structure of Database

2.1 Files and location

The database consists of 3 files;

- 'Leaders First Grant dB.mdb', this is located on '\\Embsql02\database\Leaders First dB' and this is where all the data is stored to allow future migration to an SQL server or CRM system.
- 'Leaders First Grant.mdb', this is located in the 'P:\Operations\Train To Gain\L&M 2008\Data Capture', the User Interface contains all the queries, forms, reports and macros.
- 'Leaders First Grant WG.mdw', this is located 'P:\Operations\Train To Gain\L&M 2008\Data Capture' this is used to control the UserIDs.

2.2 Special requirements

Access workgroups have been implemented. If the database is opened with the default workgroup file it will open up and prompt to connect to the correct workgroup file. After this it will then close. The workgroup file is located on ' P:\Operations\Train To Gain\L&M 2008\Data Capture ' and called 'Leaders First Grants WG.mdw'.

Only valid login accounts at the moment are 'editor' and 'advisor'.

UserID	Password	Notes
'Admin'		
'editor'		
'advisor'		

Figure 1 User accounts used in the database

3 Table and Fields

3.1 Tables and Validation rules

The main table structure is a flat single table structure which was based upon the original Excel spread sheet. This is in a separate mdb file to allow for migration to an SQL server and for additional security[1].

Also note that any database items named 'XXX' with a date appended is set for deletion and is no longer actively used and there for informational purposes.

[1] This is as per Microsoft's advice for database design.

Table Details

Name	Type	Size
Client DB Ref	Long Integer	4
Lead Source	Text	255
Adviser	Text	255
Intervention No	Text	255
EDS No	Double	8
Company Name	Text	255
No of Emp	Double	8
Area	Text	255
Diagnostic Date	Date/Time	8
Diagnostic Type	Text	50
PDP Date (Please enter dd/mm/yy)	Date/Time	8
PDP Date (revised)	Date/Time	8
Application Date	Date/Time	8
Date Sent To CRC	Date/Time	8
Received by CRC	Date/Time	8
Signed	Yes/No	1
Signed Date	Text	50
Checklist	Yes/No	1
Checklist Date	Text	50
Scan & Save	Yes/No	1
Scan & Save Date	Text	50
On LAMS Date	Date/Time	8
Company Name as on LAMS	Text	255
Sent to Grants Date	Date/Time	8
Received by Grants	Text	255
Offer Letter Sent	Date/Time	8
Review Completed	Text	255
Grant Claimed	Text	50
PDP Year	Date/Time	8
PDP Year Type	Text	50
PDP Claimed	Yes/No	1
PDP Claimed Type	Text	50
Grant Follow Up YR	Text	50
Intervention Closed	Text	50
Comments	Memo	-
Status	Text	50
Count	Double	8
Locked	Yes/No	1
Date Lead Recieved	Date/Time	8
Date Advisor Appointment	Date/Time	8

Figure 2 Structure of table data structures

3.2 Field validations

Validation is used at form level to allow the backend database to be migrated outside of Microsoft Access, and is used across all fields to ensure a consistent user experience and data accuracy. MS SQL linking to MS Access table validation does not work as expected within an MS Access database error message wise.

Normal validation;

Text
: This is a free text field allowing text and numbers to be entered.

Drop Down
: This type of field allows entry of free text and numbers and also has a drop down of all previous entries for that field in the table. It is a query based on that field from the table it is from.

Date
: This type of field allows numerical entries that are formatted in the following way, 'DD/MM/YYYY'.

Number
: This type of field allows only numerical entries.

Locked out fields
: This field is basically a view of the field, and is typically used on the 'information area' on the 'Form Data' screen.

There are some locked out fields that display data and are not for editing you are not able to click into them and they are not part of the tab stopping.

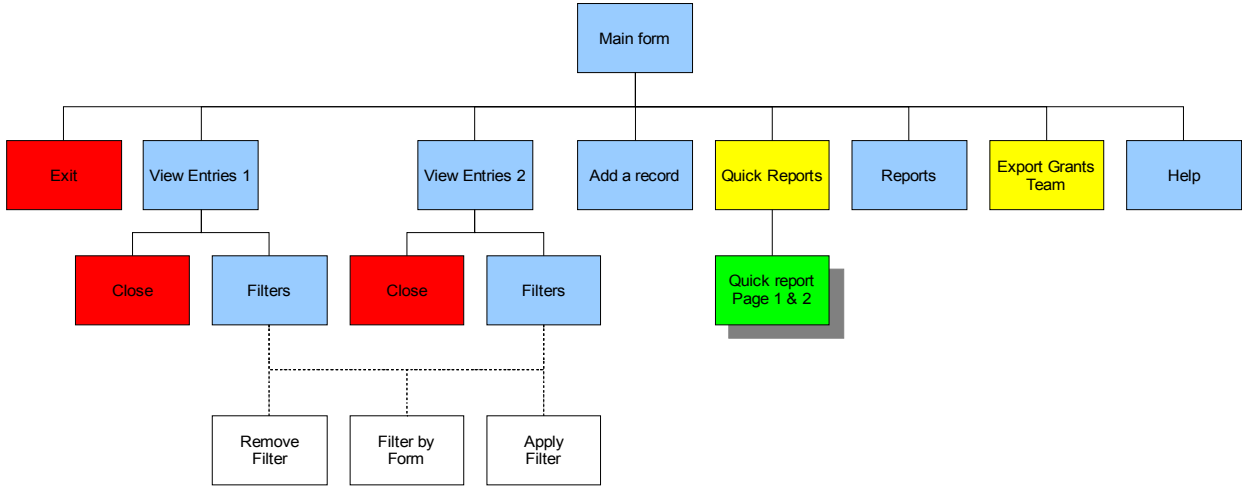
On Top of this Conditional formatting has been implemented in the following ways;

Condition 1 *'Field has focus' : the background is Grey* : is used to show where you are on the form.

Condition 2 *Expression is : 'IsNull([Field name])=True'* : This is used to indicate where data is required and is shown as a 'red' background until it contains the required data.

4 Forms

Upon opening the database you are greeted with an opening screen called Main form and a tool bar that allows access to the various areas of the database (as detailed in the figure below). Figure 3 Logical paths though the database



Leaders First Database Structure for 'main form' tool bar menu.	Colour Key	Form Action Macro Report

4.1 Login Screen Shots.

This section details some of the core elements that are used to navigate the database. It also details some areas that are used to notify of record status and field validity. Navigation between records is done using the record navigation bar at the bottom of the 'Form Data' Screen.

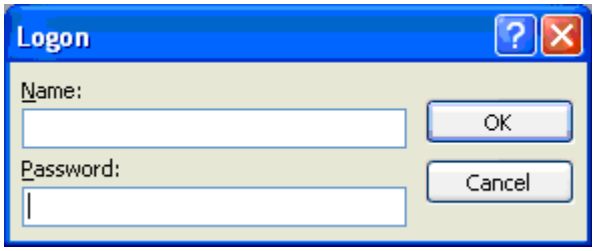


Figure 4 Login screen

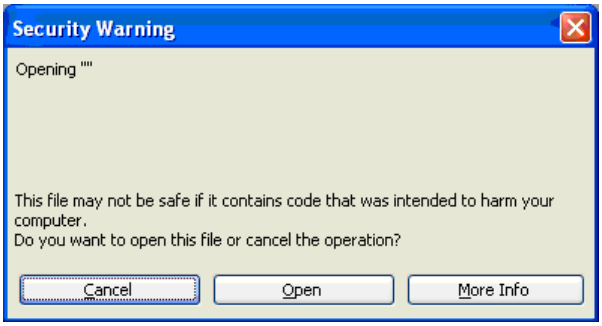


Figure 5 Security Screen click on [Open] to continue

Figure 6 Main Form screen showing the menu bar

4.2 Core Elements on Main 'Form Data' Form

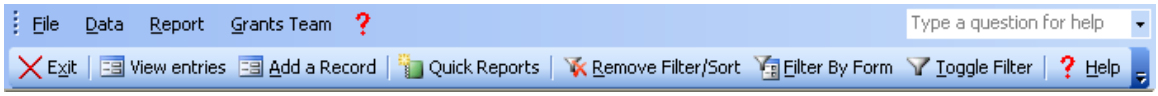


Figure 7 Menu and Toolbar.

Menu	Item	Icon	Notes
File[2]	Mail Recipient		Standard MS Access functionality.
	Page Setup		Standard MS Access functionality.
	Print		Standard MS Access functionality.
	Close		Standard MS Access functionality.
	Exit	Exit	Standard MS Access functionality.
Data	View Entries	View entries	Macro 'autoexec.View entries'
	Add a Record	Add a Record	Opens the add record form
Reports	Report Form		Advanced reporting non-functional.
	Report Quick Stats	Quick Reports	Macro 'autoexec.Quick Reports'
Grants	Export Grants Team		Exports the table data out.
	View Table Data		Allows a table view of the database
?		Help	Help Screen with example fields
		Remove Filter/Sort	Standard MS Access functionality.
		Filter By Form	Standard MS Access functionality.
		Toggle Filter	Standard MS Access functionality.

Figure 8 Menu and Toolbar break down.

Figure 9 Core information area un-editable with status area .

Tab bar.

Figure 10 Comments section for the record a free text area for general notes.

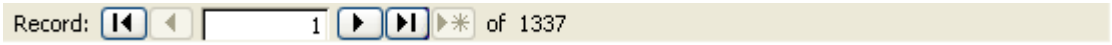


Figure 11 Record navigation section showing 1 record of 1337 records

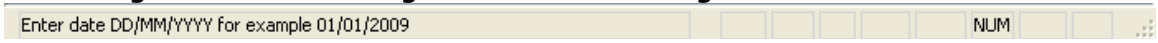


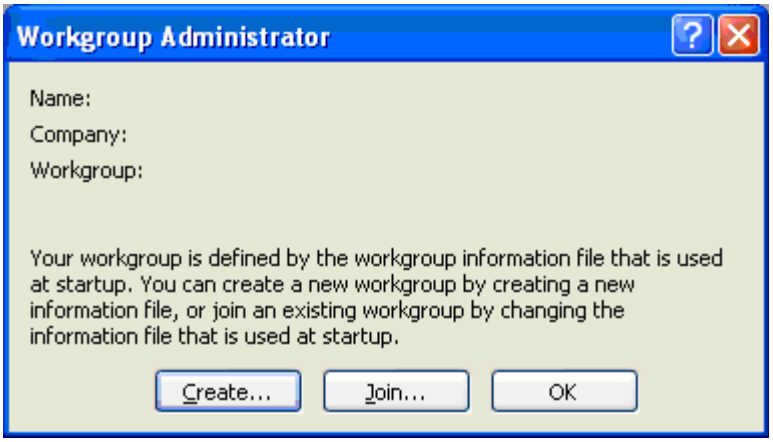
Figure 12 Status bar an area where any validation rules and guidelines is/are shown.

[2] The underlined character allows the usage of the 'ALT' key + the underlined character to be used to execute menu item.

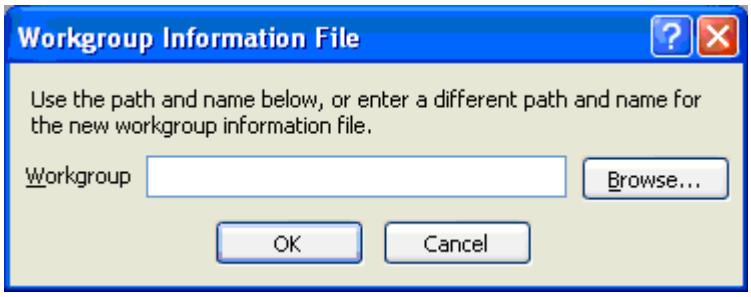
4.3 Screen shots 'Admin' account

Microsoft Access uses a 'workgroup' file with the 'Admin' account as the default account so if you were to try and connect to the database with this default 'Workgroup' file (system.mdw) the database will take the following steps to allow you to connect to the database specific 'workgroup' file and log on with an appropriate user account.

On the 'Workgroup Administrator' dialogue box click on the 'Join' button.



On the 'Workgroup Information File' dialogue box then click on the browse button and locate the database specific workgroup file[3]. Once you have located and connected to the workgroup file then click on ok and the database will close.



[3] Mentioned in the '2.2 Special requirements' section of this document.

4.4 Screen shots 'Advisor' account

Things to note about the 'Form Data' screen, when changing between records a couple of things happen based upon the contents of 2 fields. The macro that governs this is called 'autoexec.change focus'.

The field that indicates both of these fields combined is the '**Status**' field in the information section (below it is the one with the red background and Paid).

Application Status - The field signifies at what stage the grant is at this can be 1 of 6 states (*Blank*, Advisor, CRC, Grants, Closed, and Paid) and this will open up the record on the required tab for the relevant information. The value for this field can be changed by updating the pull down 'Application Status'.

Record Locked – This indicates whether the record can be edited by a 'advisor' user and id signified by the background colour of the status field in the information area. 'Green' indicates that the record is editable. 'Red' indicates that it is locked. This status can only be changed by an 'Editor' user.

Figure 13 The whole screen for 'advisor' user with all the sections showing.

4.5 Screen shots 'Editor' account

Things to note about the 'Form Data (admin)' screen, when changing between records a couple of things happen based upon the contents of 2 fields. The macro that governs this is called 'autoexec.change focus (admin)'.

The field that indicates both of these fields combined is the '**Status**' field in the information section (below it is the one with the red background and Paid).

Application Status - The status field signifies at what stage the grant is at this can be 1 of 6 states (*Blank*, Advisor, CRC, Grants, Closed, and Paid) and this will open up the record on the required tab for the relevant information. The value for this field can be changed by updating the pull down 'Application Status'.

Record Locked – This indicates whether the record can be edited by a 'advisor' user and is signified by the background colour of the status field in the information area. 'Green' indicates that the record is editable. 'Red' indicates that it is locked. This status can only be changed by ticking or unticking the 'Record Locked' field.

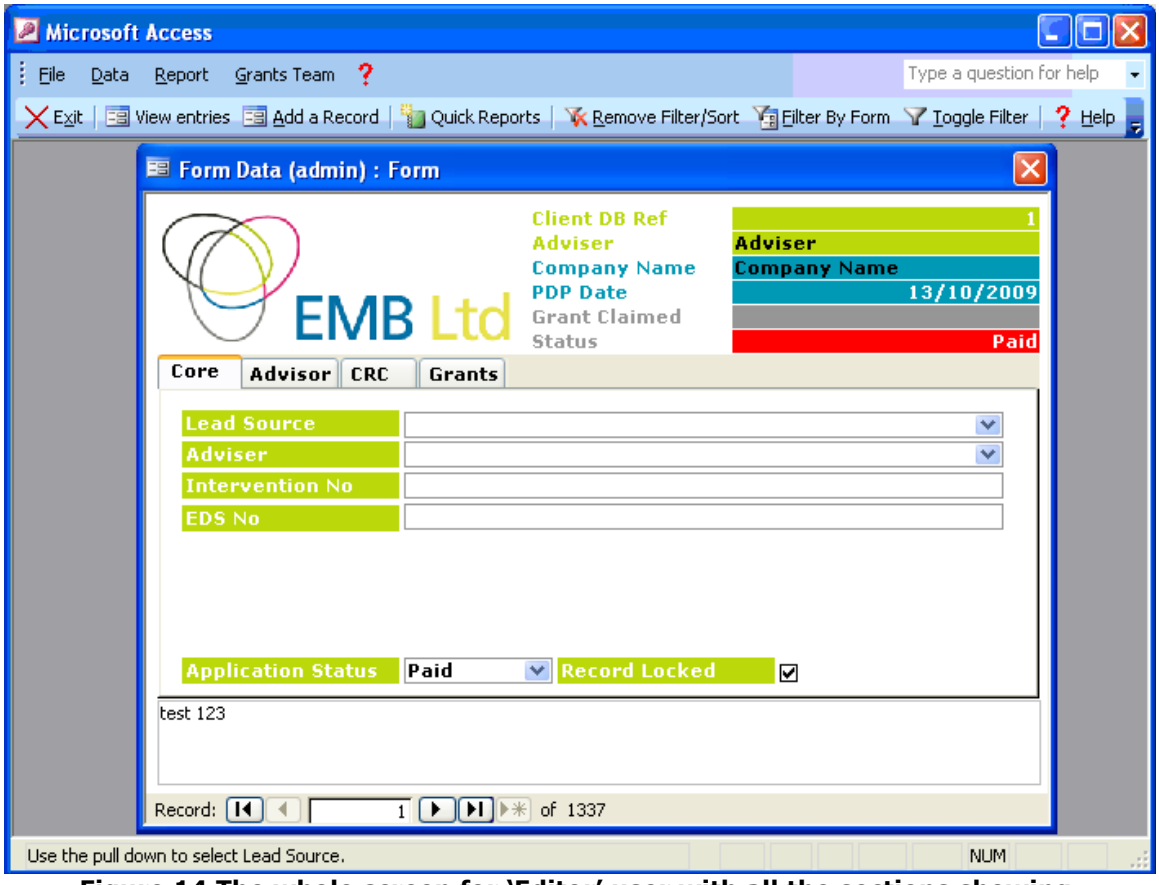


Figure 14 The whole screen for 'Editor' user with all the sections showing.

5 Reports

5.1 Report Based Queries

Overview diagram for the two 'Quick Reports' generated from the database from the 'Quick Reports' button or menu item.

Query Stacks for 'Quick Stats Reports'

Report name : Number of Employess Year 2			
1	Quick Report - Num of Emp > 5 – 1	Quick Report - Num of Emp = 0 - 1	Quick Report - Num of Emp < 5 - 1
2	Quick Report - Num of Emp > 5 – 2	Quick Report - Num of Emp = 0 - 2	Quick Report - Num of Emp < 5 - 2
3	Quick Report - Num of Emp Totals		

Report name : PDP Year 1,2 and 3 results			
1	Quick Report - PDP YR1 - 1	Quick Report - PDP YR2 - 1	Quick Report - PDP YR3 - 1
2	Quick Report - PDP YR1 - 2	Quick Report - PDP YR2 - 2	Quick Report - PDP YR3 - 2
3	Quick Report - PDP YR Report		

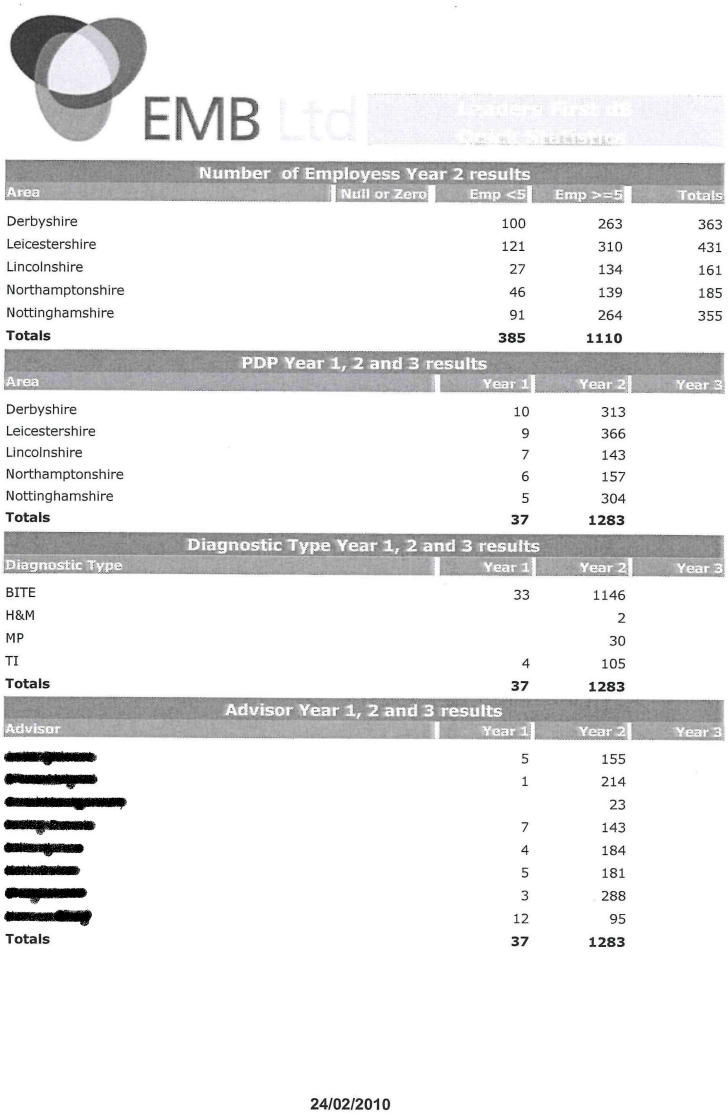
Report name : Diagnostic Type Year 1,2 and 3 Results			
1	Quick Report - DT YR1 - 1	Quick Report - DT YR2 - 1	Quick Report - DT YR3 - 1
2	Quick Report - DT YR1 - 2	Quick Report - DT YR2 - 2	Quick Report - DT YR3 - 2
3	Quick Report - Diagnostic type		

Report name : Advisor Year 1,2 and 3 Results			
1	Quick Report - Advisor YR1 - 1	Quick Report - Advisor YR2 - 1	Quick Report - Advisor YR3 - 1
2	Quick Report - Advisor YR1 - 2	Quick Report - Advisor YR2 - 2	Quick Report - Advisor YR3 - 2
3	Quick Report - Advisor		

Report name : Quick Report - PDP LAMS		
1	Quick Report - Count LAMS Month	Quick Report - Count PDP Month
2	Quick Report - Count	

Figure 15 Query stacking for 'Quick Stats Report'

5.2 Quick Report Output



EMB Ltd

Number of Employess Year 2 results				
Area	Null or Zero	Emp <5	Emp >=5	Totals
Derbyshire		100	263	363
Leicestershire		121	310	431
Lincolnshire		27	134	161
Northamptonshire		46	139	185
Nottinghamshire		91	264	355
Totals		**385**	**1110**	

PDP Year 1, 2 and 3 results			
Area	Year 1	Year 2	Year 3
Derbyshire	10	313	
Leicestershire	9	366	
Lincolnshire	7	143	
Northamptonshire	6	157	
Nottinghamshire	5	304	
Totals	**37**	**1283**	

Diagnostic Type Year 1, 2 and 3 results			
Diagnostic Type	Year 1	Year 2	Year 3
BITE	33	1146	
H&M		2	
MP		30	
TI	4	105	
Totals	**37**	**1283**	

Advisor Year 1, 2 and 3 results			
Advisor	Year 1	Year 2	Year 3
[redacted]	5	155	
[redacted]	1	214	
[redacted]		23	
[redacted]	7	143	
[redacted]	4	184	
[redacted]	5	181	
[redacted]	3	288	
[redacted]	12	95	
Totals	**37**	**1283**	

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Figure 16 Quick Report - page 1

PDPs on LAMS by month

Month and Year	PDP	LAMS	Not on LAMS
12 - 2008	2	2	0
1 - 2009	1	1	0
2 - 2009	11	11	0
3 - 2009	31	31	0
4 - 2009	213	213	0
5 - 2009	180	180	0
6 - 2009	186	185	1
7 - 2009	140	140	0
8 - 2009	125	124	1
9 - 2009	114	114	0
10 - 2009	117	115	2
11 - 2009	101	95	6
12 - 2009	74	61	13
1 - 2010	33	9	24
Totals	**1328**	**1281**	

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